REMARKS

By the above actions, claims 1 & 5 have been amended and new claims 7 & 8 added. In light of the above amendments and for the reasons set forth below, further consideration of this application is now requested.

With regard to the Examiner's rejections of claims 1, 2 and 5, under §102(a), as being anticipated by the teachings of Stengl et al. ('062) and claims 3, 4 and 6, under §103(a), as being obvious in view of the teachings of Stengl et al. ('062) combined with Muraki ('725), the rejections are considered to be inappropriate for the following reasons.

In particular, Stengl fails to disclose the important structure of the present invention that the deflecting and scanning device "deflects the electron beam to scan the mask with the shaped electron beam."

Furthermore, one of the ordinary skill in the art would not have been motivated to combine Stengl to arrive at the present invention recited in claims 1, 2, and 5 whereby the electron beam shaping device shapes the electron beam into a slender beam having a cross section of a small width in a direction of the scanning and a large width in a direction perpendicular to the direction of the scanning. Since the width of the electron beam is small, responsiveness of on-off control over application of the electron beam can be high by setting a deflection direction by a blanker to be the scanning direction (see, present specification, page 8, lines 10-12).

Moreover, contrary to the Examiner's contention, the coaxial hollow cylinder of Stengl (column 2, lines 31-36) does not correspond to the electrostatic cylindrical lens of the present invention because it has a different purpose, structure, and effect. Specifically, whereas Stengl is directed to a parallel beam producing device, the electrostatic cylindrical lens of the present invention is composed of a pair of electrodes arranged facing each other and works as an electron beam shaping device.

Furthermore, the present invention is clearly distinguishable from Muraki since the exposure methods are clearly different in that Muraki is directed to a size-reducing projection exposure method, which is different from the actual-size proximity exposure method of the present invention, and is not combinable with Stengl. In particular, while Muraki discloses repeated exposure steps on a sub-field, the present invention is directed to one-chip multiple exposures, in which the mask is disposed in proximity to a surface of the object, and all patterns corresponding to the aperture of the mask are simultaneously exposed on the surface

of the object with the electron beam having passed through the aperture of the mask.

Still further, with the present invention, the shaped electron beam does not change its size while passing through the aperture of the mask; and the throughput is improved by the claimed combination of the blanker electrode, the blanking aperture, and the shaped electron beam. Such a combination is a unique feature of the present invention in an actual size proximity exposure method.

Therefore, not only would it not have been obvious to combine the teachings of Muraki with the teachings of Stengl, but even if combined, the combination would not teach or suggest all of the features of the claimed invention.

Since neither Stengl nor Muraki, alone or in combination, teach (or suggest) all features of the claimed invention, the rejections of claims 1, 2 and 5, under § 102(a), and claims 3, 4 and 6, under § 103(a), respectively, are improper and should be withdrawn.

While the present application is believed to be in condition for allowance, should the Examiner find some issue to remain unresolved, or should any new issues arise, which could be eliminated through discussions with Applicants' representative, then the Examiner is invited to contact the undersigned by telephone in order that the further prosecution of this application can thereby be expedited.

Respectfully submitted,

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